# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 10/657,136 | 09/09/2003 | Young-Wun Song | 0630-1833P | 1908 |

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| EXAMINER |
|---|
| VUU, HENRY |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2179 | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/657,136 | SONG, YOUNG-WUN |
| | **Examiner** | **Art Unit** | |
| | Henry Vuu | 2193 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>29 October 2003</u>.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-17</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All  b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.      Claims 1-13, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by

Humpleman et al (Pub No. 2001/0038392).

As to independent claim 1, Humpleman et al. teaches:

A method for displaying positions of home network appliances (see e.g., Fig. 7 and

para. [0104]; i.e., the user may arrange and group the graphical iconic representation

of each device according to the desired placement within a home), comprising:

generating an appliance identifier (ICON image – see e.g., para. [0079]; i.e., each icon

image is associated with a respective home device) for indicating a type of each home

network appliance (home device – see e.g., para. [0079]) connected to a home

network (home network – see e.g., para. [0014]; i.e., home devices are connected

through a network within a home); setting a position pointer (text line 610 – see e.g.,

Fig. 7 and para. [0104]) for indicating a position of each home network appliance (see

e.g., para. [0104]; i.e., text line 610 is an indicator of where the network appliance is

located within the home network); and displaying the appliance identifier (device image

602 – see e.g., Fig. 7) and the position pointer (text lines 610 – see e.g., Fig. 7) on a

screen as graphic objects (device link page 606 – see e.g., Fig. 7 and para. [0104]; i.e.,

device link page 606 are visually displayed to the user in order visualize the groupings

of home network appliances).

As to independent claim 13, Humpleman et al. teaches:

An apparatus (personal computer – see e.g., para. [0052]) for displaying positions of

home network appliances (see e.g., para. [0052]; i.e., an interface is provided to the

user in order to visually illustrate Fig. 7, which identifies the network appliance and the

position of the appliance), comprising: an appliance identifier generating unit (session

manager – see e.g., para, [0082]; i.e., the session manager locates the appliance

identifier from the ICON image file and generates the image on the user interface) for

generating an appliance identifier (ICON image – see e.g., para. [0082]; i.e., each icon

image is associated with a respective home device generated by the session manager)

by reading an appliance type identifier (see e.g., para. [0082]; i.e., the session

manager reads the appliance type identifier by locating the ICON image file of a

respective home device by searching for a standard ICON image filename) and an

appliance inherent identifier (unique IP address – see e.g., para. [0090]; i.e., the

network home appliance broadcasts its information and is extracted) from appliance

characteristics data stream transmitted from a home network appliance (see e.g., para.

[0090]; i.e., the home network appliance broadcasts its presence and information over

the home network when powered on) and linking the appliance type identifier to the

appliance inherent identifier (see e.g., Fig.7; i.e., the identifiers are linked in order to

display the interface associated with Fig. 7); a position matching unit (auto-tree builder

– see e.g., para. [0098]) for setting a position pointer (text lines 610 – see e.g., Fig. 7

and para. [0104]; i.e., text line 610 is generated and set by the auto-tree builder to

determine the position of a network appliance) for indicating a position of the home

network appliance (see e.g., Fig. 7) and matching the set position pointer with the

appliance identifier of the home network appliance corresponded to the position pointer

(see e.g., Fig. 7 and para. [0103] – [0104]; i.e., the user may match the position pointer

with the appliance identifier in groups according to the respective home device's

placement); and a display unit (screen display unit – see e.g., para. [0052]) for

generating a text object for indicating the position pointer matched to the appliance

identifier (see e.g., Fig. 7; i.e., the text object corresponds to text lines 610, which

indicates the position pointer and appliance identifier), generating a graphic object for

indicating the appliance identifier matched to the position indicator (see e.g., Fig. 7; i.e.,

the graphic object corresponds to device image 602), generating a position indication

object by combining the text object with the graphic object (see e.g., Fig. 7) and

displaying the position indication object on a screen (see e.g., para. [0061]; i.e., a

viewable display is provided to visualize the identifiers).

As to dependent claim 2, Humpleman et al. teaches:

The method of claim 1, wherein the appliance identifier (device image 602 – see e.g.,

Fig. 7) indicates a model name (logo 604 – see e.g., Fig. 7 and para. [0104]) and a

serial number (manufacturer model number – see e.g., para. [0079]; i.e., the

manufacturer model number may be included at the bottom of the ICON image) of the

home network appliance (home device – see e.g., para. [0079]).

As to dependent claim 3, Humpleman et al. teaches:

The method of claim 1, wherein the appliance identifier includes an identifier for

indicating a type of the home network appliance (see e.g., para. [0073]; the device

name corresponds to the identifier for indicating a type of home network appliance) and

an inherent identifier (unique IP address – see e.g., para. [0088]) for indicating a serial

number of the home network appliance (see e.g., para. [0084]; i.e., the unique IP

address is associated with the manufacturer model number, which is used to identify a

particular home device connected to the home network).

As to dependent claim 4, Humpleman et al. teaches:

The method of claim 1, wherein the position pointer indicates positions (text line 610 –

see e.g., Fig. 7 and para. [0104]; i.e., text lines 610 indicates the position of network

appliances within a home network) of the different types (see e.g., Fig. 7 and para.

[0104]; i.e., link page 606 indicates the position of the appliances, while living room

group 608 indicates the different types of network appliances within the living room)

and the same type of home network appliances (see e.g., Fig. 7; i.e., the name brand

Samsung within the living room corresponds to the same name brand residing in

Mike's room).

As to dependent claim 5, Humpleman et al. teaches:

The method of claim 1, wherein the displaying (displaying user interface – see e.g.,

para. [0015]) step includes the sub-steps of: combining a graphic object corresponded

to the appliance identifier (ICON image – see e.g., Fig. 7 and para. [0079]; i.e., device

images 602 corresponds to appliance identifiers) with a text object corresponded to the

position pointer (text lines 610 – see e.g., Fig. 7 and para. [0104]; i.e., the text lines

610 corresponds to the textual description of the position of a home appliance); and

displaying the combined object on the screen (device link page 606 – see e.g., Fig. 7;

i.e., device link page 606 combines the textual and graphical object for visual

description of home appliances).

As to dependent claim 6, Humpleman et al. teaches:

The method of claim 1, wherein the displaying (displaying user interface – see e.g.,

para. [0015]) step includes combining a graphic object corresponded to the appliance

identifier (ICON image – see e.g., Fig. 7 and para. [0079]; i.e., device images 602

corresponds to appliance identifiers) with a text object corresponded to the position

pointer (text lines 610 – see e.g., Fig. 7 and para. [0104]; i.e., the text lines 610

corresponds to the textual description of the position of a home appliance); and

displaying the combined object on the screen (device link page 606 – see e.g., Fig. 7;

i.e., device link page 606 combines the textual and graphical object for visual

description of home appliances) in order to make a user easily recognize a home

network appliance to control (see e.g., para. [0106]; i.e., the graphical user interface

(GUI) facilitates sensible and easy selection).

As to independent claim 7, claim 7 differs from claim 1 only in that claim 7 is an

apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus

used to perform the steps of claim 1. Thus, claim 7 is analyzed as previously discussed with respect to claim 1 above.

As to dependent claims 8, claim 8 differs from claim 2 only in that claim 8 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 2. Thus, claim 8 is analyzed as previously discussed with respect to claim 2 above.

As to dependent claims 9, claim 9 differs from claim 3 only in that claim 9 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 3. Thus, claim 9 is analyzed as previously discussed with respect to claim 3 above.

As to dependent claims 10, claim 10 differs from claim 4 only in that claim 10 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 4. Thus, claim 10 is analyzed as previously discussed with respect to claim 4 above.

As to dependent claims 11, claim 11 differs from claim 5 only in that claim 11 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 5. Thus, claim 11 is analyzed as previously discussed with respect to claim 5 above.

As to dependent claims 12, claim 12 differs from claim 6 only in that claim 12 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 6. Thus, claim 12 is analyzed as previously discussed with respect to claim 6 above.

As to dependent claim 17, Humpleman et al. teaches a positioning matching

table set (database – see e.g., para. [0093]) so as to match (see e.g., para. [0093]; i.e.,

the database compares item-to-item against the previously read database in order to

perform updating procedures) the appliance identifier according to the set position

pointer (see e.g., Fig. 7 and para. [0103] – [0104]; i.e., the user may match the position

pointer with the appliance identifier in groups according to the respective home device's

placement), a text library for storing text objects (DHCP database – see e.g., para.

[0091]), a graphic library (ICON image file – see e.g., para. [0079]) for storing a graphic

object corresponding to the appliance identifier (see e.g., para. [0079]; i.e., the ICON

image file stores the images that represents particular types of home appliances), a

matching table managing module (DHCP Server 310 – see e.g., para. [0091) for

reading the appliance identifier matched to the pertinent position pointer (see e.g.,Fig.

11 and para. [0090]; i.e., the home device broadcasts its information over the home

network to DHCP Server) by matching the position matching table (database – see e.g.,

para. [0093]; i.e., the database is compared item-to-item against a previously read

database for any differences found) according to a display request signal generated by

a user (see e.g., para. [0015]), a storing module for storing the text object and the

graphic object (DHCP database 314 – see e.g., para. [0093]; i.e., device information

such as text and graphic objects are stored in DHCP database 314), a graphic display

module for displaying the position indication object generated in the position indication

object generating module on the screen through graphic processing (session page 802

– see e.g., Fig. 10 and para. [0104]; i.e., the position indication object is displayed on

session page 802, which corresponds to the position indication object generating

module), a position indication object generating module (session manager 802 – see

e.g., Fig. 10) for generating a position indicating object (text lines 610 – see e.g., Fig. 7)

By combining the text object with the graphic object (see e.g., Fig. 7; i.e., text object

corresponds to text lines 610 and graphic objects corresponds to device images 602,

which are combined in the living room group 608) stored in the storing module (DHCP

database 314 – see e.g., para. [0091]), and a library managing module (session

manager – see e.g., para. [0082]) for reading the graphic object (see e.g., para. [0082];

i.e., the seesion manager is responsible for locating the ICON image file of a respective

home device to be displayed) for indicating the appliance identifier (see e.g., Fig. 7;

device images 602 is displayed to identify the home network appliance) read from the

matching table managing module (DHCP Server 310 – see e.g., para. [0091) from the

graphic library (ICON image file – see e.g., para. [0079]; i.e., the ICON image file stores

the images of home devices and is in communication with DHCP Server 310) and the

text object matched to the appliance identifier from the text library (see e.g., Fig. 7; i.e.,

the text object corresponds to text lines 610 and the appliance identifier corresponds to

device images 602 which is matched together through group 608).

## *Claim Rejections - 35 USC § 103*

3.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.      Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Humpleman et al. (Pub No. 2001/0038392) in view of Kanevsky et al. (Patent No.

6,426,761).

As to dependent claim 14, Humpleman et al. teaches a network interface module

(Ethernet – see e.g., para. [0048]) for receiving application characteristics data streams

from the home network appliances (see e.g., para. [0048]; i.e., home network 100 uses

an Ethernet for receiving audio/video and command/control data streams from the home

network appliances for data communication), and a stream processing module (network

communication layers – see e.g., para. [0044]) for reading an appliance type identifier

and a product inherent identifier (see e.g., para. [0044]; i.e., the home network uses the

network communication layers to communicate between different home devices by

transmitting data such as the appliance and inherent identifiers) from the received

appliance characteristics data stream (see e.g., para. [0046]), and further linking the

appliance type identifier with the product inherent identifier (see e.g., Fig. 7).

Humpleman et al. further teaches a text library (DHCP database – see e.g., para.

[0091]) for storing the appliance identifier (see e.g., para.[0091]; i.e., the unique IP

address and logical names are stored in the DHCP database), but does not teach a text

processing module for adjusting  text sizes. Kanevsky et al. teaches a text editor (see

e.g., column 2, lines 1 – 4) for adjusting text sizes (see e.g., column 11, lines 54 – 65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate the appliance identifier generating unit of

Humpleman et al. with the size adjustment mechanism of Kanevsky et al. because

Kanevsky et al.'s text adjustment allows dynamic highlighting of text assisting the reader

to quickly comprehend the significance of the document by enlarging the text size of

more frequently read text (see e.g., column 11, lines 59 - 65).


5.      Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Humpleman et al. (Pub No. 2001/0038392) in view of Kanevsky et al. (Patent No.

6,426,761), and further in view of Ando et al. (Pub No. 2002/0091812).


As to dependent claim 15, Humpleman et al. teaches appliance characteristics

data stream (see e.g., para. [0090]; i.e., the home network appliance broadcasts its

presence and information over the home network when powered on) received from the

network interface module (Ethernet – see e.g., para. [0048]; i.e., home network 100

uses an Ethernet for receiving audio/video and command/control data streams from the

home network appliances for data communication), parsing the appliance

characteristics data steam (see e.g., Fig. 2 and para. [0044]; i.e., each interface layer is

responsible for parsing particular data elements), a generator for reading the appliance

type identifier and the product inherent identifier from the appliance characteristics data

stream (ReadDHCPDB( ) – see e.g., para. [0095]; i.e., the ReadDHCPDB( ) works in

conjunction with GENIP, which reads the home appliance information from the data

stream). Kanevsky et al. teaches a text editor (see e.g., column 2, lines 1 – 4) for

adjusting text sizes (see e.g., column 11, lines 54 – 65), but both Humpleman et al. and

Kanevsky et al. do not teach a buffer for storing the appliance characteristics data

stream, a preprocessor, outputting a register signal corresponding to the temporarily

stored appliance characteristics data stream. Ando et al. teaches a buffer (ring buffer –

see e.g., para. [0055]), a preprocessor (CPU 113 – see e.g., para. [0040]), transmitting

source (see e.g., para. [0060]; i.e., the transmission of a registered signal corresponds

to the transmission of data on the source side). Therefore, it would have been obvious

to one of ordinary skill in the art at the time the invention was made to incorporate the

stream processing module of Humpleman et al. as modified by text editor of Kanevsky

et al. as with the ring buffer and preprocessor of Ando et al. because the ring buffer of

Ando et al. stores the information and address of appliances into a table (see e.g., para

[0055]; i.e., the buffer stores the appliance characteristics data stream into a table), and

the preprocessor allows the discriminating and managing of appliances (see e.g., para.

[0036]).

As to dependent claim 16, Humpleman et al. teaches a position matching table

set (database – see e.g., para. [0093]) to record the appliance identifier according a

position pointer (see e.g., para. [0093]; i.e., the database is compared to a list, which

will perform an update if any new home appliances are added to the home network), an

indicating module for indicating the appliance identifier adjusted (session manager –

see e.g., para. [0082]; i.e., the session manager determines the appliance identifier), the

position pointer set in the position matching table (see e.g., para. [0093]; i.e., the GENIP

process 316 periodically reads home appliance information including the position of a

device). Humpleman et al. further teaches a position matching module (auto-tree builder

– see e.g., Fig. 7 and para. [0100]; the auto-tree builder uses the IP address of the

device to indicate the position of a home appliance) for matching the appliance identifier

(see e.g., para. [0104]; i.e., the auto-tree builder allows the user to group respective

home devices) indicated by the indicating module (session manager – see e.g., para.

[0082]) to a pertinent position indicator according to a user operational key signal (see

e.g., para. [0101]; i.e., the user selects home device button 406 corresponds to the user

operational key signal), and a matching table managing module (DHCP Server 310 –

see e.g., para. [0091) for distinguishing the home network appliance by recording the

appliance identifier (DHCP database 314 – see e.g., para. [0091]; i.e., the DHCP Sever

310 assigns unique IP address and logical name for the home device and stores the

information in DHCP database 314 to distinguish different home devices) on the

position matching table by the position indicator according to the information matched in

the position matching module (database – see e.g., para. [0093]; i.e., the database is

compared item-to-item against a previously read database for any differences found).

Ando et al. teaches a buffer (ring buffer – see e.g., para. [0055]), a preprocessor (CPU

113 – see e.g., para. [0040]), transmitting source (see e.g., para. [0060]; i.e., the

transmission of a registered signal corresponds to the transmission of data on the

source side).

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art Pub No. 2003/0103088 can be applicable and considered as pertinent art to applicant's disclosure. Prior art disclosed by Dresti et al. teaches a graphical user interface that allows the operation of consumer appliances in designated rooms within a home network. Through the user interface, a user is allowed to control appliances such as TVs, DVD players, Cable Boxes, VCRs, audio receivers, lighting, air conditioners and other related network appliances. Furthermore, Dresti et al. further teaches modules that control the operation of communication, transmission, and generation of devices, with the use of a home network through the utilization of servers, tables and databases.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art Pub No. 2003/0107476 can be applicable and considered as pertinent art to applicant's disclosure. Prior art disclosed by Sahinoglu et al. teaches initializing device IDs, and location IDs to home network appliance.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art Patent No. 6,735,619 can be applicable to applicable and considered as pertinent art to applicant's disclosure. Prior art disclosed by Sawada et al. teaches the use of pointers within a home network to assign positions to home appliances in a household.

### *Inquiries*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Henry Vuu whose telephone number is (571)270-1048.

The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chanh Nguyen can be reached on (571)270-1048. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner's Initials: *H. V.*

Examiner's Signature:

Date: 9/15/2006

CHANH D. NGUYEN
SUPERVISORY PATENT EXAMINER